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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,617	10/27/2003	Steven M. Powell	2802-159-030	5140

7590 06/16/2006

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EXAMINER
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BRINSON, PATRICK F

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/694,617		POWELL ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Patrick F. Brinson		3754	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 16 March 2006.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 36-40 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 36 and 37 is/are rejected.

7) ☒ Claim(s) 38-40 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All    b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,706,865 to **Douchet** in view of U.S. 4380242 to Gray et al.

The patent to **Douchet** discloses a multi-layered hose comprising a first layer (2) formed of a plurality of polyamide layers, namely an inner layer of polyamide 12, an intermediate layer of polyamide elastomer, and an outer layer of polyamide 6. A second layer bonded directly onto the first layer is a layer (3) formed of a hot melt polyurethane. **Douchet** does not disclose the durometer between 63 Shore D and 83 Shore D. The patent to **Gray et al.** discloses a multilayer hose including an inner layer (12) formed of a polymeric material that is self-supporting such that it has substantial hardness and stiffness at its outer surface so that it does not flow or displace substantially into the vacant spaces formed along the undersurface of the reinforcement layer. The layer preferably has a hardness of from about 75 Shore A to about 63 Shore D. It is further disclosed that the polymeric material may be

polyurethane. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the polyurethane of **Douchet** to have a durometer of at least 63 Shore D as suggested by **Gray et al.** in order to provide substantial hardness and stiffness to the high pressure fluid pipe in order to accept the reinforcement without substantial deformation of the tube.

***Allowable Subject Matter***

2. Claims 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Amendment***

3. Applicant argues that it would not be obvious to modify the second layer (3) of polyurethane of **Douchet** to having a durometer of at least 63 Shore D because the layer is not a structural component of the hose, but rather is a thin adhesive layer. It should be noted that a layer of the hose, regardless of thickness is a component of the hose. The upper limit to the thickness of the layer, according to **Douchet**, .1mm, is not significantly smaller than the lower limit, .25mm of the layer of the present invention. Therefore, the thickness of the layers is relatively similar. Furthermore, **Gray et al.** is merely used to disclose that it is known that a polyurethane layer can

have a shore durometer between about 63 Shore D and 83 Shore D, in order to prevent its displacement into the reinforcement layer applied directly thereto, as is the case in both **Douchet** and **Gray et al.** Therefore it would be obvious to one of ordinary skill in the art to modify the polyurethane layer of **Douchet** to have the specific durometer hardness as suggested by **Gray et al.** in order to provide a layer having sufficient hardness or stiffness according the specific use of the hose.

#### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (571) 272-4897. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kevin P. Shaver** can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patrick F. Brinson  
Primary Examiner  
Art Unit 3754

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P. F. Brinson  
June 12, 2006